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ABSTRACT

The purpose of this study was to develop a theory for the relationship between primary school teachers' autonomy and collegiality and its impact on their professional development. In the first phase of the research, 39 teachers from 11 primary schools in Belgium were interviewed about autonomy, collegiality, and professional development. The questions of the semi-structured interview were based on orienting theory, making explicit the researcher's research thesis. A two-part analysis of the data was made. The first part reconstructed the story of each teacher regarding professional development and each school regarding autonomy and collegiality. The second phase used multiple case research. Two schools were selected from among the schools in the first phase and data were collected over a six-week observation period. The data confirmed the existence of collegiality variants. For example, teachers' communication often takes place very informally as in hallway conversations, but these are important collegial experiences. Autonomy was found to be a balancing act between too much dependence on colleagues and not enough. Novice teachers, in particular, are reluctant to seek colleagues' advice lest they appear less qualified or less competent. (Contains 97 references.) (JLS)

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ED 407 382

TEACHERS' PROFESSIONAL DEVELOPMENT: A SOLITARY OR COLLEGIAL (AD)VENTURE?

Paper presented at the Annual Meeting of the AERA

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Introduction

Societal developments on several domains confront schools and teachers nowadays with ever more and various demands (Elchardus, 1994; Hargreaves, 1994b). In order to meet these challenges, teachers' professional development is considered vital (Hoyle, 1989; Vonk, 1989). More than that, current societal developments are so all-embracing and encroaching, one cannot expect teachers to take care of their professional development individually. Within the context of the deregulating, decentralizing and privatizing educational policy, each school is expected to create favourable conditions for teachers' professional development (Berg, 1983).

Analyzing the research literature, one is confronted with an overwhelming abundance of workplace conditions proven conducive to teachers' professional development and school improvement (Smylie, 1994). Yet one workplace condition seems to beat the lot: collegiality. Initially, collegiality got the status of solution for all problems. It was considered a conditio sine qua non for teachers' professional development (Little, 1987, 1992). Lieberman (1986, p. 6) argued: "Contexts, needs, talents and commitments differ, but one thing appears to be constant: schools cannot improve without people working together."

Later on, this (far too) enthusiast plea for collegiality was reconsidered. Hargreaves and Fullan (1992) made an essential contribution to this differentiation through their analysis of the teachers' culture. They pointed at the culture of individualism, a pervasive workplace condition in teachers' work. Both authors also described teachers' collaborative cultures. Even though they qualified the latter positively in terms of the consequences for teachers' professional development, their viewpoint left explicit scope for the importance of teachers' autonomy. Indeed, they stated firmly that collaborative cultures are characterized by an appreciation for teachers' individuality. Their argument that one finds often disagreement in these cultures, because teachers discuss their personal values and beliefs, illustrates this.

An equally thoughtful approach of the impact of collegiality and autonomy can be found in Huberman's (1993a, 1993b, 1992) analysis of teachers' professional development. He argues that organizational support for teachers' professional development requires - among other things - the access to colleagues' expertise. Nevertheless, he decribed persuasively the importance of teachers 'pottering' autonomously in their own classroom.

McLaughlin (1994) follows a similar line of reasoning when she argues that healthy professional communities are needed to support teachers' professional development. Such communities are characterized by authenticity, openness, interdependence, trust and high professional standards. They can only originate and maintain when managed adequately and when there are many opportunities for teamwork, critical reflection and consulting colleagues. Finally, these communities valorize diversity in the team. McLaughlin (1994, p.48) states: "Healthy professional communities at all levels embrace diversity. They acknowledge and integrate the tension between individual and group, and they possess

effective strategies of conflict resolution that enable individual preferences and needs to coexist within the context of shared beliefs, goals and values."

Even though the recent view on teachers' collegiality leaves room for their autonomy, the precise relation between both workplace conditions remains unexplained. Moreover, the mechanics through which this relation influences teachers' professional development remain a 'black box' (Firestone & Pennell, 1993). These observations led us to a qualitative study, that wanted to formulate an answer to the following research question: How do teachers' collegiality and autonomy relate to one another in (Flemish) primary education and how does this relation affect teachers' professional development?

After a general outline of the methodology used in this study, the orienting theory at the basis of it is discussed. Next the results are presented. We confine ourselves to the description of the relation between autonomy and collegiality and it's impact on professional development with regard to the relationship among the teachers. In the final section the importance of the findings is examined.

Methodology

The purpose of the study was to develop a substantial theory (Glaser, 1982) accounting for the relation between primary school teachers' autonomy and collegiality and its impact on their professional development. Departing from the stand that reality can be considered socially constructed (Blumer, 1969), an interpretative study in three phases was set up (see table 1).

Table 1 Methodology of the study

	Aim	Method	Result
Research Phase 1	exploration of the key concepts	semi-structured interview of 39 teachers	sensitizing concepts
Research Phase 2	insight in relations and patterns	2 case studies	substantial theory
Research Phase 3	external validation	10 condensed case studies	"saturated" substantial theory

The first phase of the study focused on the exploration of the research themes. A theoretically sampled selection (Glaser & Strauss, 1967) of 39 teachers of 11 primary schools was interviewed with regard to autonomy, collegiality and professional development. The questions of the semi-structured interview were based on an orienting theory (Whyte, 1984), making explicit the researcher's presuppositions in combination with the insights found in the literature. The data were analyzed in two steps. First the stories of each teacher (for professional development) and school (for autonomy and collegiality) were reconstructed through a vertical data-analysis. The presentation of these data in matrices (Miles &

Huberman, 1994) allowed for the second step, the horizontal analysis of the data, through comparison between the schools. Both analyses resulted in detailed descriptions of teachers' autonomy and collegiality and of their professional development. The reliability and validity of these findings were guaranteed by the methodological openness and the discussion of the results with peers and the interviewees.

The sensitizing concepts (Blumer, 1969) that were developed in this first phase were rendered more definite in the second one. Here attention was explicitly focused on the relations between the concepts and on the patterns that could be discerned in these relations. In order to capture this dynamic, we chose to make a case study (Yin, 1989). To be able to generalize these findings we set up a multiple case research (Firestone, 1993). Two schools were selected theoretically out of the first research phase sample. The orienting theory - refined with the insights gained in the first phase - was the basis of the case study protocol. In this protocol not only the specific research questions and hypotheses were stated. Also the strategies to gather observational and interview data, documents and quantitative data were described in detail. Once the data were collected they were organized in case records. In the first phase of the analysis we looked for patterns in the data of each school using matrices. In the second phase the insights of both case studies were confronted. This comparative analysis led to the formulation of a substantial theory (Glaser, 1982) about the impact of the tension between primary school teachers' autonomy and collegiality on their professional development. Throughout the case studies and the analysis of the data, the researcher took care of the internal reliability and validity. She stayed during a rather long period (of 6 weeks) in each of the schools. She worked with a detailed case study protocol and kept a research diary in which she controlled her subjectivity. Aso triangulation, member checks and peer debriefing were used.

The substantial theory laid the foundation of the third and final research phase that concentrated on the external validity or generalizability. Through a multiple case design we aimed at analytic generalization (Yin, 1989). The developed theory was used as an orienting theory to formulate new research questions and hypotheses. It also allowed to choose carefully 10 settings (with enough variation on the crucial variables) for research. Of each of these schools a condensed case study was made, in which - again on the basis of an elaborated case study protocol - qualitative as well as quantitative data were gathered. In the first, vertical phase of the analysis each school was depicted on the basis of vignettes and reports. In the second, horizontal phase the data matrices of the schools were compared in order to find out whether the substantial theory could stand new evidence. The attention paid at negative evidence and at extreme cases or outliers guaranteed that the substantial theory would not be laled satisfied wrongfully. Besides that the sampling technique, methodological triangulation, striving for controlled subjecticvity and the confrontation of the findings with the literature supported the reliability and validity of this research phase.

One can conclude that the study had the character of a "process composed of a set of double-back steps. As one moves forward, one constantly goes back to the previous steps."(Glaser, 1978, p.16) The substantial theory was refined in every phase of the study. On the basis of the acquired insights and the derived theoretical sampling the researcher went back to the field to gather new data in order to answer increasingly more specified research questions. As such more and more depth in the analysis was reached without losing contact with the perception of the research participants. The research can be labeled as an hermeneutic activity (Eisner, 1981) that was oriented towards an understanding of what is of importance for the people involved according to their own mode (Smeyers, 1994). Not only the "what" but also the "why" of the activities of the research partcipants (Smith, 1983; Peshkin, 1993) were revealed. Several methodological options (see a.o. Goodman, 1992; Constas, 1992; Van Ijzendoorn & Miedema, 1986; Smaling & Maso, 1990; Guba, 1981; Wester, 1990; LeCompte & Goetz, 1982; Smaling, 1990, 1992) guaranteed the internal validity (Verhoeven, 1995) and dialogical validity (Kvale, 1994; Hammersley, 1992) of the findings.

The orienting theory[1]

The study of the literature and the formulation of the researcher's assumptions with regard to the key notions of the research problem led to the following orienting theory, on which more precise research questions and theoretical sampling were based.

Collegiality and autonomy

Variants of collegiality

Collegiality is often considered a necessary condition for professional development. Moreover, the plea for collegiality (especially in the recent past) is founded more often on prescription than on description (Campbell & Southworth, 1990). In addition Little (1990, p. 509) draws attention to the fact that "the term collegiality has remained conceptually amorphous and ideologically sanguine." Consequently, the question whether the statement that teachers' collegiality leads automatically to the disappearance of their isolation and contributes always to their professional development attests to a certain simplicity is legitimate.

In order to conceptualize the notion of collegiality accurately and to gain insight in it's significance for teachers' professional development, Little (1990) makes out a case for a profound analysis of the content of collegial interactions (see also Clement & Staessens, 1993; Clement, Staessens & Vandenberghe, 1993). She discerns four variants of collegiality, that form a continuum from

[1]As we describe the orienting theory and the results of this study, we will not refer to the exact phase in the research each insight stems from. This would lead us too far. Since the third phase of the research validated the developed theory in globo, this confinement is acceptable.

independence to interdependence. Storytelling and scanning for ideas refer to rather opportunistic contacts at a relatively great distance of the actual classroom practice. The team members operate almost independently from one another. They "satisfy the demands of daily classroom life by occasional forays in search of specific ideas, solutions or reassurances." (Little, 1990, p. 513) The variant aid and assistance bears reference to the asking and giving of help. Sharing relates to the interchange of materials, methods and new ideas. Joint work, finally, bears upon team members' meetings that emphasize shared responsibility for teaching, shared ideas about autonomy and support for the professional initiatives of colleagues. In a context where joint work prevails, both the individual teacher and the school as a whole are important[2].

Variants of autonomy

In other words, joint work leaves room for teachers' autonomy. As such Little's (1990) conceptualization differs from the more common way teachers' autonomy is approached in the literature. Very often, indeed, autonomy is labeled a deficit. Autonomy is related to uncertainty and fear (Lortie, 1975; Rosenholtz, 1989). It is argued that autonomy results from a defensive attitude (Ashfort & Lee, 1990). It is not considered a good starting point for teachers' professional development, because it would lead to confidence in outmoded educational views that are inspired on teachers' own experiences as a pupil. Usually teachers' autonomy is presented as a herecy (Hargreaves, 1993).

As indicated in the introduction, Hargreaves (1993) tried to modify this negative picture of autonomy. He distances himself from conceptualizations of autonomy as a personal deficit of teachers and discerns three forms of autonomy as a workplace condition. Constrained individualism can be described as a situation that enforces teachers to work autonomously because of administrative or organizational limitations. Teachers wanting to collaborate, do not dispose of time or a place to consult with one another. Strategic individualism occurs when teachers because of the high pressure on them - external pressure, the growing number of pupils with educational needs and the like - choose consciously to withdraw in their own classroom. Hargreaves (1990, p.16) speaks of a "calculated concentration of effort". The third variant of autonomy he discusses, is elective individualism. Not as much on the basis of pragmatic concerns, but on the basis of intrinsic reasons teachers choose actively to work alone. Usually a specific task for a limited period of time is involved. This variant of autonomy holds prospects for creativity, personal study, reflection, the elaboration of new orientations, in a word, for professional development.

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[2] This elucidates that a good understanding of the impact of collegiality cannot be separated from a more general analysis of the functioning of the school as a whole. Our study made unequivocally clear that a micropolitical reading of the team functioning, the school leadership and the mission of the school offers interesting leads to understand the way collegiality - and autonomy - are shaped within a school (Clement, 1995). These findings are not treated explicitly in this paper.

The normative and polar view that collegiality and collaboration are just like that favourable for teachers' professional development and autonomy obstructive, is refined. Autonomy and collegiality both can have a positive as well as a negative influence. Much depends of the way both workplace conditions function in the school context. Moreover, it seems impossible to uncouple both workplace conditions from one another. Little's (1990) description of joint work in particular makes this point clear. More in general one could say that autonomy and collegiality complement one another in a natural way (Wildman & Niles, 1987). This leads to a circular view on autonomy and collegiality. This implies that both workplace conditions interact with each other continuously in different configurations and can't do without one another. Simply put: in order to collaborate adequately, teachers need to work alone sometimes, and - vice versa - in order to work autonomously adequately, teachers need to collaborate sometimes (see also Clement, Staessens & Vandenberghe, 1994). Autonomy and collegiality relate to one another in a tension. This tension gets its shape at the level of the school organization. It is a workplace condition that influences teachers' professional development. A "good" organizational design of the tension between autonomy and collegiality creates professional challenges. It functions as an organizational incentive for the professional development of individual teachers (Johnson, 1986; Mitchell, Ortiz & Mitchell, 1987). This "good" design can be described as an interdependence among teachers that doesn't exclude independence (Campbell & Southworth, 1990; Lieberman & Miller, 1991). Point of departure in this reasoning is the statement that collegiality can favour teachers' professional development. Besides the fact that it can contribute to emotional support, collegiality can challenge teachers intellectually and give them fresh ideas. But the freedom to keep this learning firmly in one's own hands is a crucial part of a good designed collegiality. The teachers themselves should decide (or should have the chance to decide) when and what collaboration is relevant for. Their autonomy needs to be respected, it also holds prospects for professional development.

Learning opportunities and learning space

Professional challenges that originate from the tension between autonomy and collegiality can be conceptualized as learning opportunities. Learning opportunities are essential for teachers' professional development. Because they stimulate teachers to put their professional functioning to discussion, they can lead to learning experiences (cfr. infra). Learning opportunities can have a formal or informal character. They can originate during in-service but also in the school when for instance an experienced teacher counsels a novice or when a teacher tries to find a solution for a problem he or she is confronted with. In other words, learning opportunities existing in a school can be labeled as the "level of opportunity" (McLaughlin & Yee, 1988): the incentives, challenges, support and feedback occurring in teachers' work context, giving them the opportunity to gain new competences and to experiment.

The presence of learning opportunities is a necessary, yet not sufficient condition for professional development. It is of crucial importance teachers do something with these learning opportunities (see e.g. Bullough, 1994; Collinson, Sherrill & Hohenbrink, 1994; Lange & Burroughs-Lange, 1994). Personal experiences and beliefs play an important role in the way teachers react to these learning opportunities (cfr. infra). Yet, the learning space created within the organization, making it possible for teachers to work constructively with the learning opportunities, is at least as important. McLaughlin and Yee (1988) refer to the "level of capacity". They define this as the level of the power and control teachers dispose of to strike resources, to participate in the decision making with regard to issues important for them and the availability of the instruments (teaching material, time, money) to work adequately. With this description they put themselves in line with the notion of teacher empowerment (Prawat, 1991). The teacher empowerment research becomes - in the light of the connection made in this orienting theory between empowerment and the notion of learning space - interesting when it examines the conditions deemed necessary for the improvement of teachers' knowledge and organizational adroitness. One can differentiate between measures of a structural and cultural nature (see a.o. Young, 1990; Maeroff, 1988; Kirby & Colbert, 1992; Mertens & Yarger, 1988; Sickler, 1988).

In the first category teachers' participation in decision-making at the level of the classroom (contents and methods of instruction) and the level of the school is unequivocally praised as a relevant strategy. Also, teachers should be freed of administrative, non-instructional tasks and they should dispose of adequate time and teaching materials. The school leader can support teachers' empowerment by paying attention to in-service, by making relevant literature available, by giving information and support problem solving activities. With these last recommendations we reach the cultural measures favouring teacher empowerment. School leaders should create an atmosphere of trust fostering teachers' commitment and they should take them seriously. Furthermore the taking of risks, the development of creativity and the engagement in innovations should be stimulated. (Immaterial) rewards for teachers' efforts are deemed important. These structural and cultural interventions to empower teachers can be considered as measures to create a learning space. When teachers are recognized as professionals and can work in an atmosphere of trust where neither participative decision making nor autonomy are a taboo; they are supported at the same time to tackle learning opportunities in a constructive way. Then professional development is possible. Put otherwise: an adequately supportive learning space allows learning opportunities to evolve into learning experiences.

Professional development

The succession of learning experienves is exactly what we mean with the notion of professional development. Teachers' professional development is often conceptualized as a process (Elliot, 1992). Little (1986, p.33) describes it as follows: "Learning to teach is (...) like learning to play a musical instrument. Beyond the wish to make music, it takes time, a grasp of essential patterns, much practice, tolerance for mistakes and a way of marking progress aling the way." The image one gets of

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professional development is that of a longterm (Wildman & Niles, 1987; Bernier & McClelland, 1989) and non-linear process (McLaughlin & Marsh, 1978; Hertz-Lazarowitz, 1993; Kelchtermans & Vandenberghe, 1994). The complexity of this process is sharply illustrated in a one year case study of a teacher who was confronted with an innovation that had to lead to a stronger child-oriented approach (Walsh, Baturka, Smith & Colter, 1991). This teacher stated firmly she didn't change that much. Yet, each outsider was impressed with the changes in her teaching practice. What they described as a radical change, was labeled by the teacher as a slow and continuous process. This made it possible for her to account for her changing in a way she didn't have to minimize her previous approach.

The course of this process is determined by the continuous interplay between the individual and the organization. It's obvious that individual teacher characteristics leave their mark on this interaction. In the literature the importance for professional development of for instance jobsatisfaction (Kottkamp, 1990; Helderman & Spruit, 1993; Tuetteman & Punch, 1992), teachers' commitment (Reyes, 1990; Rosenholtz & McAninch, 1987), their efficacy (Imants, 1988; Imants & De Brabander, 1992, Smylie, 1990) and involvement (Clement, Sleegers & Vandenberghe, 1995) and their biography (Kelchtermans, 1993) is stressed. However, notwithstanding the subjective and idiosyncratic features of teachers' professional development, this process also is characterized by some remarkable constants beyond the individual. Indeed, each teacher is confronted with some specific tasks during his or her career (Vonk, 1989). They have to develop knowledge and expertise on the pedagogical, didactical and organizational level (Klaasens, 1994). Learning experiences in each of these domains are the driving force behind this development.

Professional development in each of these areas requires a lot of teachers' interpersonal and pedagogical capacities (Nias, 1989). Yet, the craftmanship - the instrumental control - that results of this evolution is not sufficient on it's own. For teaching demands the ability to integrate these instrumental capacities (Pratte & Rury, 1991) in order to contribute to the development into adulthood of the youngsters (Vonk, 1989; Woods, 1987). Therefor teachers need to be aware of their own capacities and they have to show a genuine engagement to develop these within the context of their career (Kilbourn, 1991; Cryns & Johnston, 1993). In other words, it is not enough for teachers to fall back on their "tacit recognotion, judgments and skillful performances" (Schön, 1983, p.50). Their action needs to be sustained with reflection (Schön, 1983; Copeland, De La Cruz & Lewin, 1993) on the basis of which they can indentify and solve problems in such a way that their knowledge is refined. Through the continuous reflection on their own practice, teachers develop mastery out of their craftmanship.

Summary

The orienting theory at the basis of this research can be summarized as follows. Teachers' professional development is considered a continuous process determined by the interplay between the individual and

the organization, leading to a combination of craftmanship and mastery. More concretely learning experiences at several domains lay at the basis of professional development. Learning experiences are the result of the interaction between learning opportunities and the learning space. It is hypothesized that the tension between autonomy and collegiality is an important organizational determinant of teachers' professional development, since the design of this tension leaves more or less room for learning opportunities and an adequate learning space to come about.

The results

The orienting theory described above laid the foundation for the consecutive research phases. Hereafter the results of the study are presented. Exemplary we will focus on the relationship among teachers[3]

Collegiality and autonomy

Variants of collegiality

The (observational) data confirmed the existence of variants of collegiality described by Little (1990). During breaks and in the corridors stories are told about the weather, television programmes, politics... Even though these stories often have the character of small talk, their symbolic value must not be underestimated. Not only do they allow teachers to relax. Storytelling also functions as a significant way to communicate genuine care for one another. Team members show understanding for each other's health problems or experiences with their own children. The stories can also be significant at the professional level. Teachers can pour their heart out about certain pupils or the principal. They can give one another positive feedback on particular initiatives.

As such storytelling van lead to the offering of help. A teacher tells: *"We arranged we're one hour class free together each week. During that hour we go through our programme for the week and we check for special things. During breaks we ask each other: 'I've treated that theme and I had that problem. Did you have it too? What did you do about it?' That's really reassuring!"*[4]

Consequently, offering help can lead to the exchange of ideas. Sharing takes place during (formal) meetings and informally in between lessons. A teacher tells: *"If I find something new, I can tell about it. If the others think it's relevant, we add it to the programme. If it was a success, we keep it for next year, otherwise we throw it out again. We say then: 'We won't do that anymore, it was too difficult for the pupils' or someting like that... We always evaluate it together."*

[3] Clement (1995) analyses besides this also the relationship between teachers and their principal and that between teachers and the remedial teacher.
[4] Passages in italics are statements of the respondents. In the translation we tried to affect the original meaning as little as possible.

In some cases the sharing of ideas leads to joint work. Starting from a shared responsibility, teachers work together on projects like the school play, the year planning of some subjects or the annual stay at the seaside. *"We have a programme for our stay at the seaside of course. We've done this for years now, going one week a year to the seaside with our sixth graders. Yet we try to do something new each year. Just to keep it exciting for ourselves too. It's very positive we can talk about it when we prepare it. Each of us puts in some fresh ideas. We discuss them all. It's also fun to live through it together once we're there. We're really one group over there."*

Variants of autonomy

Our results support Hargreaves' (1993) analysis of autonomy. In some cases teachers are almost forced to work autonomously. Constrained autonomy can proceed from a lack of support from colleagues. the following statement illustrates this: *"When I started my career I really didn't know how to teach maths. I didn't have had the training for it. So, in the beginning I had to find out how to teach it. I needed some help. If you're only a beginner, it's difficult to get some help. Also, my colleagues were very busy. They didn't have the time to help me. So I had to solve my problems on my own."*

In other cases teachers consciously protect their professional practice from one another. Strategic autonomy is used very often to avoid critics of colleagues: *"You can consult. But you cannot discuss each and every problem with your colleagues. For some problems you have to find a solution yourself. Like for instance, if you have difficulties with one of the children, the real 'problemchildren', then it's delicate to discuss that with your colleague. You don't feel inclined to tell about it, because the other would doubt your competence. Especially if you're a novice teacher. Then they look at you with Argus' eyes, don't they."*

The conscious choice to deal with one's own business autonomously is evident for the majority of the teachers. It is closely connected to the idea they have each a specific individuality that cannot be denied. The importance teachers attach to the maintenance of this individuality is legitimized from the need they feel to establish a very personal didactical and pedagogical relationship with the pupils. The need to do this, starting from their individuality and an explicit involvement towards the pupils, lays the basis for the elective autonomy. *"You're free. To a certain extent at least. There's always the curriculum of course. There is a fixed amount of time you have to spend on maths, language ... a certain programme or planning you have to follow. But within this curriculum you're really free, you know, to experiment, to try new things out. The day you don't experiment anymore, it's over. That would be a pitty, that's the day you should leave, because teaching demands creativity."*

Sometimes teachers invite one of their colleagues explicitly to take responsibility for certain tasks. Characteristic for this variant of autonomy we labeled ascribed autonomy (and which is a complement to those Hargreaves (1993) described) is that it is recognized explicitly by the whole team. On the basis of their specific knowledge or particular skills the team authorizes certain teachers to work out specific tasks autonomously, like for instance the organization of extra-curricular activities or the collaboration with mothers for reading exercises. Besides that, the ascribed autonomy also appears with regard to tasks of a more explicit didactical character. Teachers are asked to demonstrate a particular teaching technique they're good at, or they become the well-known specialist to address when one has trouble with children showing behavioural problems. Typically this form of autonomy is explicitly integrated in the team's collegiality. The fact that teachers who enjoy ascribed autonomy are given the opportunity to report on their activities during team meetings illustrates this. As such, the ascribed autonomy not only influences positievely the professional development of the executive teacher, it may also affect that of his or her colleagues. *"We prepare excursions in our own class with the pupils, but once we're gone it's me who's responsible for the explanations. I'm proud I can do that. I know a lot about the region we usually go to. It's my native region and it has always interested me. So on these excursions I can pass this through to the children and my colleagues. We had a new colleague this year coming along and she said afterwards she learned a lot. Such things make me proud. I feel a little bit responsible for the inservice of my colleagues on that topic, you could say."*

The tension between autonomy and collegiality

The ascribed autonomy makes clear how closely autonomy and collegiality are linked to one another. One can also state in more general terms that the way in which team members work alone in schools is strongly associated to the way they collaborate. In some schools the team members succeed to collaborate without loosing respect for one's autonomy: *"All ideas lie on the table, we discuss them, but we can work them out in our own way for our own pupils. You can't of course enforce your colleague to do it your way: 'I want to do it like this with my children, I want you to do that too.' We're rather free. I believe that's crucial, because you have your own personality, your own way of teaching. We handle the children differently..."* If the tension between autonomy and collegiality is defined like this, the elective and ascribed autonomy of teachers can easily lead to collegial interactions. Personal initiatives of teachers give chances to question for help and sharing of material and ideas. The collegial interactions at their turn are a source of inspiration for colleagues to work autonomously.

In other schools both workplace conditions seem to be disconnected. Teachers' autonomous work doesn't incite collegiality and, vice versa, the collegial interactions do not hold impulses for autonomy: *"I have some ideas, but I never tell the others about it, because they would do it too. It doesn't belong any longer to you, then. You invent it, you think it over, you work hard to make it work. If you tell the others about it, they pilfer it right under your nose. They take it over and it feels no longer your's."* In

this configuration teachers' autonomy quite often takes on a strategic character. It is not a basis to graft meaningful collegial interactions on. In fact, in these schools collegiality is so limited that it barely has any influence on teachers' autonomous work.

Conclusions: the orienting theory refined

These observations led to the following conclusions. Different variants of autonomy and collegiality can be discerned. One variant of autonomy was added to the orienting theory. The description of both workplace conditions show that the variants sometimes bear close resemblance to one another. Sharing ideas among the teachers can easily lead to the offering of help or can function as a green light for joint work. Constrained autonomy can become strategic and elective autonomy can develop into ascribed autonomy. The criterium to ascribe activities and experiences to one or the other variant of autonomy and collegiality, is always to be found in the subjective perceptions of the teachers involved. As such it is possible that teachers experience the fact that they should work out their maths lessons autonomously as something they are forced to given the lack of help by colleagues. It is however also possible they see it as an interesting professional challenge they consciously want to realize autonomously.

Autonomy and collegiality can vary a lot, in other words. The qualitative differences between the variants can be described and explored using the notion of *profundity*. Autonomy and collegiality can be characterized by great openness. One is prepared to share his or her personal opinions and beliefs and experiences about the professional functioning with the others. The inherited traditions of independence and egalitarianism (Smylie, 1992) are left behind, in order to engage oneself with an interdependent attitude in autonomy and collegiality in a way that - on the basis of mutual trust - initiatives are appreciated and stimulated and that each other's work is looked at with critical scrutiny. In other words, it is possible to reach the level of the subjective educational theory. Kelchtermans (1993a) defines the subjective educational theory as the personal system of knowledge and beliefs that functions as the basis on which a teacher builds up and judges his or her own professional functioning. The variants of autonomy and collegiality can be shaped in such a way that they allow teachers to express their rules and principles for practice and their professional images. Less profound variants of autonomy and collegiality don't permit this so much. They function in a way that offers teachers the opportunity to leave their subjective educational theory concealed.

The idea that stories allow for less profundity than joint work and that constrained autonomy gives less possibilities to reach the level of the subjective educational theory than ascribed autonomy, is very attractive. Little (1990) builds up the same line of reasoning when she states there exists a linear continuum from stories to joint work, from autonomy to the collective, that can be described using the notion of profundity. However, this view doesn't seem to cover the complex reality completely. Our findings indeed demonstrate that the difference in profundity can also be observed within the variants of the workplace conditions. By way of illustration: in some cases teachers present their colleagues the

initiatives they take on the basis of their elective autonomy; in other cases the elective autonomy rather leads to a defensive attitude inspired by the importance attached to the maintenance of one's individuality. The first design of elective autonomy allows more to express one's subjective educational theory than the second one. The same goes for the stories being told. They can be rather superficial, even banal or they can - "densely coded" (Nias, 1989) as they are - throw a light on one's subjective educational theory through their professional import.

To put it briefly, the results show that autonomy and collegiality can take different forms. It would be too simple, however, to state that some of these variants are always more profound than the others. The notion of profundity, defined as the openness to express one's subjective educational theory, not only allows to interpret the differences between variants of autonomy and collegiality, it is also an interesting tool to analyze the differences within these variants. This is an important addition to the orienting theory.

The orienting theory concerning the tension between autonomy and collegiality can also be refined. Two main variants of the tension can be discerned. On the one hand, there is the *polar* tension between autonomy and collegiality. Both workplace conditions are limited in shape (joint work, for example, is rare). Moreover, the variants are characterized by a lack of profundity. The interactions among the teachers don't demonstrate a lot of openness to discuss the subjective educational theories. Basically the most common attitude is one of strategic autonomy. Autonomy and collegiality do not inspire one another. On the other hand, the tension between autonomy and collegiality can get a *circular* character. Autonomy and collegiality show a rich diversity ad profundity. Collegial interactions are a source for the autonomous work and autonomous initiatives often lead to meaningful collegial contacts.

Summarizing, one can state that autonomy and collegiality appear in different forms in the relationship among the teachers. These variants differ in profundity. Diverse and profound autonomy and collegiality are typical for the circular tension between both workplace conditions. In case of a polar tension the variants are less diverse and show less profundity. The consequences of all this for the professional development of teachers become clear when one analyzes the tension with the notions learning opportunities and learing space.

Learning opportunities and learning space

The impact of a circular tension on teachers' professional development

If the teachers succeed in defining the tension between autonomy and collegiality in a circular way, learning opportunities occur as well as the learning space they need to handle these challenges constructively. This becomes clear when we analyze the circular tension characterizing the relationship among the teachers in one particular school. The majority of the interactions among the teachers holds

prospects for learning opportunities to come about. Teachers can learn a lot from the comments of colleagues. As they see and hear each other busy with their work, they got a lot of inspiration. What's more, the weekly scheduled consultation gives small groups of teachers peace and quiet to share professional matters with one another, to help one another and to set about joint work. Often this collaboration is inspired by the tasks the principal gives the teachers in order to prepare the monthly team meetings. It's evident that the evaluation of a didactical computer software, the discussion of particular learning problems of certain pupils, the consultation about good ways to differentiate, the collaborative editing of exercises for certain subjects and so on, can imply learning opportunities that - if the teachers take advantage of them - can help them to get more grip on their professional functioning. This is also the case for the very concrete didactical tips teachers of this school give one another during consultation. Also, the feedback on autonomous work of colleagues for a joint project often leads to profound discussions about good teaching practice. In other words, learning opportunities arise in the relationship among teachers: *"We always put consultation time to good use. It happens often we keep talking about for instance a test. We ask one another how it worked out. We check the results and we analyze the failures of the pupils. Then we ask ourselves whether we didn't make any mistakes in teaching the subject."*

The respect teachers so typically show for one another's autonomy in a circular tension, implies that these learning opportunities are sustained by an adequate learning space. The teachers can decide to great extent for themselves where they want to get with their colleagues. They can give informal contacts and formal consultation a very personal cachet. In their relationship there's enough room to take autonomous initiatives. New ideas are treated in an open, though critical way: *"(...) I think everybody has the right to say: 'Look, this won't work.' Yes, then we'll try something else (...). We always try new things out first. Afterwards we decide together whether we'll work further with it or not."* Colleagues offer each other learning opportunities with no strings attached. They give each other the freedom to decide for themselves what to do with these opportunities: *"He will never, never say: 'That's the way you have to teach', or 'You have to do it like this'. Never. He won't do that. What he says is: 'Look, I do it like this. What do you think about it?'"*

The respect for each colleague's autonomy makes teachers tolerant for the way each of them handles learning opportunities. The varied and profound collegiality makes it possible to support one another when working with learning opportunities. The circular tension between autonomy and collegiality implies that learning opportunities and learning space are usually well adjusted to one another. Consequently a lot of learning experiences come about. These are situated on several domains. In some cases teachers learn from their colleagues how to manage their pupils: *"When I began teaching I was really very strict. Now, I'm more relaxed. I have to pay attention I don't become too loose. The children can tell things they wouldn't be allowed to tell in other classes. I have to take care I don't go too far. My colleague says sometimes: 'I wouldn't tolerate what you permit!' We're so far we can*

discuss the way we interact with the pupils." Other learning experiences refer to the teachers' didactical tasks. Due to remarks of a colleague the teacher of the first grade revises the way he introduces addition and subtraction. Colleagues inspire each other with regard to the illustrative materials they use in their lessons. As such the relationship among colleagues usually has positive implications for their professional development.

The impact of a polar tension on teachers' professional development

In another school - where the tension is defined in a polar way - a different scenario emerges when one analyzes the tension between autonomy and collegiality using the notions of learning opportunities and learning space. In this school, learning opportunities are very scarce. The teachers hardly know what their colleagues actually do in their classes: *"They never come in to take a look in my classroom. They don't know what I teach my pupils. They only know how I handle children from seeing me on the playground."* Consequently teachers receive very little or no feedback on their work from their colleagues. They don't feel close in terms of their teaching practice. Stories are superficial, help is almost never asked, sharing is rare (not to speak of joint work). Even stronger, teacher's interest for another's classroom practice is often interpreted as medlesomeness: *"I always try to show some interest, but some of my colleagues don't like that (...), they say then: 'here he goes interfering again!'"* The scarce feedback teachers do get on their work from their colleagues is so superficial and often so negative, one can easily understand it doesn't really function as an opportunity to learn something: *"'Well, well, what was all thát messing around in your classroom!' I mean, those things can and should be said, but if that's the only comment you get... That's painful for somebody who tries, very painful..."* Learning opportunities are very scarce in this relationship. The negative tension between autonomy and collegiality inhibits teachers to create real learning opportunities. This becomes clear in the way they handle the implementation of new teaching methods. Such innovations are not taken advantage of to launch a profound discussion about the options the team wants to take: *"Like with this new method for maths. That really hurts me. You cannot express your critical comments. They immediately label you as a non-cooperative one, the one who absolutely wants to pursue a different course. They make it look like I'm the troublemaker, despite all my efforts to make something out of that new method. Those who say all that stuff are the ones who have never seen my work in my classroom."*

Even if there is a chance for a learning opportunity to come about, it is very difficult in this school for it to grow into a real learning experience, because support of the learning space is often lacking. The learning space is not properly adjusted to the learning opportunitiy. When the ethics teacher has some difficulties with one particular pupil and wants to exchange some ideas about this issue with the classroom teacher, her attempt to share her experiences and to find out whether something is wrong with the little boy don't yield a lot. The learning opportunity she's eager to create for herself, is not sustained

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by an adequate learning space. Indeed, the classroom teachers restricts his comment to: *"He said then - and I thought that was a little bit strange - he said it was a 'signal'... I didn't think that was very supportive."* She is convinced a certain competition stands in the way of a constructive exchange of ideas and problem solving: *"Why he said that ... I don't know... Maybe it was kind of a competition ... That little sentence, I don't know, it felt like an accusation..."*

The lack of adjustment of the learning space to the learning opportunities - which are anyway scarce and often superficial - implies that concrete learning experiences are exceptional in the relationship among the teachers in this school. The teachers often react in a discouraged way. They feel as if they have to look for appreciation outside the school: *"... I really look forward to the holidays then and you have to look for esteem for who you are and what you do outside the school."* Some teachers try themselves to create opportunities for professional development. They refine their teaching practice by reflecting on the remarks they get from their pupils. They point for example to the fact they learned how to deal with conflicts among pupils, how to keep one's lessons interesting enough and how to exercise one's authority. *"The children really put you on the way."*

Conclusions

These data warrant the following conclusions. With regard to the adjustment of the learning opportunities and the learning space three patterns can be discerned. In case of a circular tension between autonomy and collegiality, learning opportunities (stemming from teachers' autonomy, collegiality and the interplay between both) and learning space are attuned to one another. Teachers are formally and informally challenged at the level of their pedagogical and didactical functioning as well as at the level of the way they behave within the team. They dispose of learning space to handle these opportunities constructively. Consequently, learning experiences influencing teachers' professional practice are evident.

In case of a polar tension between autonomy and collegiality both workplace conditions function independently. Teachers' collegiality is scarce, superficial and often negatively coloured. That doesn't stimulate the creation of learning opportunities. The predominance of the strategic autonomy impedes an open dialogue that could give rise to impulses for teachers' professional development. The second pattern consists in other words in the fact one lets pass by the chances to create learning opportunities. Inattention may cause this, but most certainly also the fact each of the partners wants to protect his or her own territory, plays an important role.

The third pattern is characterized by the fact there are actually some learning opportunities, but these are not adequately supported by a constructive learning space. The challenges resulting from the independent autonomy and collegiality not only are scarce, the polar tension also makes it very difficult to manage them constructively. This set-up consequently doesn't lead to a lot of learning experiences.

The tension between autonomy and collegiality, not only has an impact on the number of learning experiences that can be observed. Also, the quality of the learning experiences differs according to the adjustment of learning opportunities and the learning space. These qualitative differences amount to the impact of the learning experiences. Some of them are more fundamental than the others. They function as a critical incident. They force teachers to question their usual way of handling things and to put aside their usual approach to cope with new challenges (Kelchtermans, 1993a). They lead up to teachers making analyses of the pupils' mistakes, changing their attitude towards the pupils and taking initiatives in the team. In the second school teachers almost never referred to the relationship with their colleagues as a source of learning experiences. If they do, one gets the impression the impact of these experiences never reaches a very deep level. Teachers tell for instance one of their colleagues gave the hint to visit an exhibition with the pupils.

Fundamental learning experiences, on the contrary, have a critical character because they "touch" teachers' professional self, bring it up for discussion and result in the refining of their subjective educational theory (Kelchtermans, 1993b), finally ending in concrete changes in teachers' professional functioning. The learning opportunities teachers are confronted with, lead them to question their usual approach. They feel the need to adjust their professional self and their subjective educational theory to cope with the challenges they're confronted with. Put more simply: the fundamental character of learning experiences not only can be deduced from the observed changes in their professional functioning, but also from the fact that these changes are based on the refinement of their professional self and subjective educational theory.

If the tension between autonomy and collegiality is defined in a circular way, there exists a greater chance that fundamental learning experiences arise because the learning experiences and the learning space are attuned to one another. Moreover, this tension is characterized by more profound variants of autonomy and collegiality, which, as was demonstrated, reach the level of teachers' subjective educational theory. The inadequate support of learning opportunities or the lack of attention to create them - two patterns typical for the polar tension, that is characterized already by less profound forms of autonomy and collegiality - prevent fundamental learning experiences to arise.

Professional development

How long it takes to learn to teach

Fundamental learning experiences on several domains are the materials of teachers' professional development. This is made clear through the research data. The results also confirm that learning to teach is far from easy (Wildman & Niles, 1987). It can be defined as a long process of trial and error (Little, 1986; Walsh et al., 1991). Yet, the data do not reveal an image of professional development as an inevitably continuous process. Five of the 39 teachers who were interviewed in the first research phase expressed a very limited view on professional development (in terms of the time it takes to learn to

teach). In fact they argue that one cannot really learn to teach, since it's a gift: *"I think you have to have it in you. Some people have it from the very moment they start their career. They gain of course some experience throughout their career. Some are gifted and others probably will never get it."* This view is only slightly modified by some of the teachers holding it. The nuance they make, refers to the idea that one needs a year or two to learn to teach on the condition one can keep the same grade during that time. After that period one can simply *"hold the class"* and one doesn't have to worry because *"the same things come back whole the time"*. The majority of the teachers holds a more longitudinal point of view with regard to the time it takes to learn to teach. Yet almost all of them indicate there is a certain breaking point. After a first, very challenging period, a phase follows in which professional development is not so evident (see also McLaughlin & Marsh, 1978; Aitken & Mildon, 1992; Rosenholtz, 1989). The teachers point out that a lot depends on their personal engagement with regard to their professional development. Yet, their comments also reveal that the organization plays an important role too. Professional development cannot simply be dismissed as an individual affair. The importance teachers attach to their interactions with colleagues, the challenges that result of the interaction with pupils or of the changing of grades, all demonstrate that professional development is also an organizational matter, however strong teachers may argue teaching is an innate gift: *"I think it was easier at the beginning. I try to read as much as possible at home and to talk it over with friends. Because, you know, if you restrict yourself to your own grade, it's kind of limited, isn't it. I believe I've lost already a lot of what I once learned. So if there is an opportunity I most certainly would change grades. Simply to be forced to do something else. I don't think I would be able to carry on for 20 years in the same grade."*

What teaching is all about

All the teachers we interviewed for this study were unanimous though on one point in their perception of professional development. That is on the central place the pupils occupy in this process. They formulate the aims of their professional development - what we described as craftmanship and mastery in our orienting theory - very succint in terms of working for and with the pupils in a well-founded way. As such they confirm the well known research finding that teachers place the relationship with their pupils at the very core of their profession (Fullan & Stiegelbauer, 1991; Lieberman & Miller, 1991; Louis & Smith, 1990; Vonk, 1989): *"I'm still very motivated. I hope this will last forever, because a teacher who's not motivated, is a bad teacher, don't you think so. The children, they are the most important. the children still are my most important incentive."* Teachers feel satified because of their relationship with the pupils. Kottkamp(1990) discerns two aspects in this satisfaction, that we found too. On the one hand teachers derive great pleasure from the good performances of the pupils. The scores of the pupils are in a way the proof of their efforts. *"I should tell you about the feeling you get when you really get accross. It's a real pleasure to see your pupils learned something they didn't know yet, or master something they had difficulties with. That's a real pleasure."* The teachers want to treat their subjects in such a way *"the pupils look happy and satisfied"* and say *"yes, we've learned something"*.

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Teachers quite often indicate that their job reaches further than treating the subjects and themes prescribed by the curriculum. They want to contribute at a certain basis for later life. They want to arm their pupils with a sense of critical judgment. In other words, they want to contribute to the development into adulthood of their pupils.

In order to realize this aim teachers need a sound pedagogical relationship with their pupils. The interaction with the pupils is indeed the second aspect of teachers' professional satisfaction (Kottkamp, 1990). The teachers want to get to know and understand their pupils, so that they can build up a warm rapport in which each child feels at ease. Or as one teacher expressed it: *"Each child should be happy when it enters your classroom."*

One could rephrase the aims teachers set for their professional development as follows. Through this process teachers want to get their teaching well in hand. They want to feel good and at ease in their job. They want to gain a certain control that makes it possible to work with their pupils in a way that is didactically and pedagogically well-founded. This justified control makes it possible for them to enjoy the benefits of their efforts. Therefore teachers acknowledge that a certain flexibility is indispensable. Indeed, in order to keep working with the pupils in a responsible way, professional development is a stringent requirement. A lot of teachers are aware of the fact that they can and have to develop professionally. They don't want to rust in their old habits. A flexible attitude contributes to their control: *"I always try to realize the ideas I've got in my head. I sometimes loose my sleep over it, so that I just get up to write my ideas down in order not to forget them. The following day I try them out with my children and it makes me happy if it's a success. I say then: 'Well, this really worked. I can use this idea in the future again.'"* Control, accountability and flexibility are the core themes of teachers' professional development. They make clear on a more concrete level how teachers give body to their craftmanship and mastery (see also Provenzo, McCloskey, Kottkamp & Cohn, 1989).

Different professionals

When an analysis is made of the way teachers at a certain point in their career give shape to these core themes of professional development, one gets an idea of their professionalism. Indeed, we made a 'snapshot' of the way teachers involved in our study experience their own professional functioning in terms of *control*, *accountability* and *flexibility*. This revealed three distinct types of professionalism, as can be seen in table 2.

Table 2 *Types of professionalism*

	Control	**Accountability**	**Flexibility**
Progressive	ok	class + school	necessary
Conservative	ok	class	not important
Reactionary	not ok	class	absent

Teachers who can be characterized as progressive professionals have control over their work. One of these teachers (of the first grade) says for example: *"Each year, in september, I have this frightening feeling: 'Oh, my god, they're so little!' I feel very determined then, I cannot make any mistake, or things will be messed up for the rest of the year. But once we've started this tension and insecurity disappear completely. I really love to work with these kids."* Progressive professionals have no difficulty to account for their work. They do that spontaneously for their work in the classroom as well as for their functioning at the school level, within the team. For their work with the pupils, progressive professionals account for what they do referring to the well-being of the children, as well as to their achievements: *"In the first place, I believe that the children as well as I have to feel good in the class. I think it's crucial to keep everyone involved. I insist on a quiet atmosphere in the class, though that doesn't inhibit us from having a good laugh once in a while. But when it's working time, we all take it seriously."* The functioning in the team doesn't pose any problems. Progressive professionals invest a lot in the team. They do so on professional terms (and not primarily for sake of friendship, for instance): they want their functioning at the school level to contribute to their professional development: *"All colleagues collaborate in our team. I feel really good in this school. I have a good relationship with the principal too. He realized a lot in this school. Sometimes I think: 'Jee, this is heavy', but in the end you always see the results of what he suggests you to do. And then I feel happy I did it. As long as it makes you work better with the children, it's allright, isn't it."* Out of their justified control progressive professionals are indeed eager to refine their professional practice. They experience flexibility as a necessary tool to become a good professional. Progressive teachers are the ones who are always looking for learning experiences. And if they don't find them, they create them themselves. They try out innovative methods in their own classroom or they jump at challenges that make it possible to do something new at the school level (e.g. set up a project-week for all classes).

Contrary to these flexible progressive professionals who have their job under control in a justified way, some teachers can be characterized at a certain stage in their professional development as reactionary professionals. They have no real control over their work, in the sense they don't feel good at what they do. They restrict themselves to their classroom practice and they show no flexibility. Reactionary teachers admit they don't feel good: *"I don't feel at ease with these children... You know, there are kids who really respond to your approach, who give you back when you give them. But there are others it doesn't work with."* Although these teachers often claim very explicitly they love their work and account for what they do in terms of a good relationship with the pupils they strive for, they are not successful. Often they are isolated team members. They keep their distance. They work on their own and don't keep up with innovations. Even stronger, they feel no need for flexibility: *"Well, to be honest... With regard to that new method for maths... It's not my cup of tea, you know... I teach the basic notions and for the rest... I glanced through my old method once again and I must admit, I prefer to hold on at that.. .. I do."*

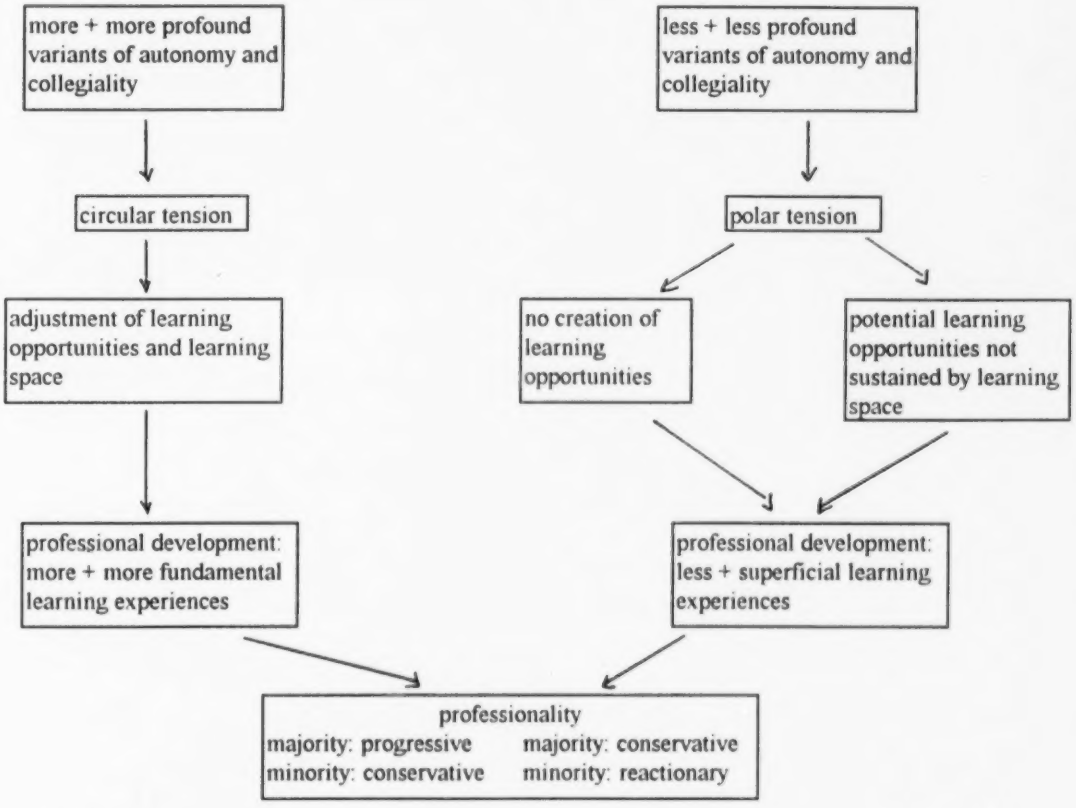
Somewhere in between these two types are the conservative professionals. These teachers feel good, they have control over their work: *"Well, it's my 21st year in the first grade. Long before things actually happen you can predict them unerringly. You simply have to take that into account."* This feeling is so strong they don't feel the need to change. Conservative professionals don't reject flexibility, but it doesn't take a very dominant place in the way they give shape to their professionalism: *"The years count for something, you know. For example, it would be very difficult to make me do things in another way than I'm used to. Not that I would resist it... but it would be difficult to convince me (...). I do my job, you see. I want to tackle new things, but I won't really look out for them."* This attitude explains why conservative professionals tesify little or none fundamental learning experiences. They keep on the same course once set during their training. The control they gain as such doesn't hold prospects for flexibility. In their account for their work these teachers spontaneously restrict themselves to their work in the classroom. They want to do a good job with the pupils, in the pedagogical as well as the didactical sense.

These results reveal that teachers experience their professionalism in different ways. A remarkable conclusion of our study is that certain types of professionalism occur more in some school than in others. Indeed, the data of our third, validating research phase, confirm that the majority of the teachers who are working in a school that is characterized by a circular tension between autonomy and collegiality and by an adjustment of learning opportunities and learning space so that fundamental learning experiences can take place, has reached the level of progressive professionalism in their professional development. Schools were there exists a polar tension - with all the negative consequences for the adjustment of learning opportunities and learning space - have far more conservative and reactionary professionals in their team.

Discussion

Our study led to the following substantial theory with regard to the impact of the tension between autonomy and collegiality on the professional development of primary school teachers (see figure 1).

Figure 1 *Substantial theory explaining for the impact of the tension between autonomy and collegiality on teachers' professional development*


more + more profound variants of autonomy and collegiality
less + less profound variants of autonomy and collegiality
circular tension
polar tension
adjustment of learning opportunities and learning space
no creation of learning opportunities
potential learning opportunities not sustained by learning space
professional development: more + more fundamental learning experiences
professional development: less + superficial learning experiences
professionality
majority: progressive
minority: conservative
majority: conservative
minority: reactionary

Teachers' professional development is a complex process taking place on different domains. It consists more concretely of learning experiences. The proof of teachers' fundamental learning can be found in concrete changes in their professional functioning, that are based on refinements of their professional self and their subjective educational theory. For such learning experiences to originate it is crucial that learning opportunities and the learning space are adequately attuned to one another. With regard to this adjustment three patterns were discerned. Learning opportunities and the learning space can be adjusted properly, but it can also happen that one doesn't take advantage of the chances to create learning opportunities or that potential learning opportunities are not supported adequately by the learning space. The first pattern is characteristic for a circular tension between autonomy and collegiality. Diverse and profound variants of autonomy and collegiality inspire one another. Teachers get the opportunity to develop into progressive professionalism. The two other patterns manifest themselves in case of a polar

tension between autonomy and collegiality. Autonomy and collegiality are less diversified and less profound. They don't inspire one another. This constellation leads to an accent on censervative, even reactionary professionalism.

The above stated theory refines the common statement that the school organization influences teachers' professional development. Indeed, the degree to which workplace conditions, such as autonomy and collegiality, give rise to an adjustment of learning opportunities and learning space is determining for the school's impact on professional development. As such insights in both workplace conditions were modified. Collegiality doesn't automatically conduce to professional development, teachers' autonomy is also important. Teachers claim respect for their autonomy because their relationship with the pupils is central to them. Insofar teachers' pursuit of autonomy and self-realization doesn't harm the pupils' interests, it should be respected. As Buchman (1990, p.504) puts it: "There is no paradox in claiming that some forms of inwardness, of 'being situated within' are consistent with improving teaching and schools, although the idea of teachers pottering around in their classroom, putting things to working order, and making small-scale changes may be unpalatable to outsiders given no grander scheme and prior images of human agency. Yet it does not follow that what is grander in scope or style, and higher in status, is also more appropriate, good or right. Conversely, the potterers may be looking at the stars." Our study shows, however, that such "heavenly inspiration" is strongly fostered by a school organization characterized by a circular tension between autonomy and collegiality. Such circular tension cannot be created by enforcing collegiality through, for instance, the establishment of structural forms of collaboration. Teachers should be motivated to collaborate - if this collaboration gives rise to the creation of learning opportunities and an adequately adjusted learning space. But longing for a completely collegial school is as unrealistic as undesirable. Most teachers plan and teach certain things better on their own, some maybe function better when working completely autonomously. As Hargreaves (1994b, p.67) says: "The solitary mode has its place." How then, can we create schools where teachers' professional development is fostered through an inspiring interplay between profound variants of autonomy and collegiality? Hatton (1987) suggests to follow two tracks simultaneously. Firstly, one should create "cultural interruption", bringing teachers' opinions, beliefs and norms up for discussion. Besides that "structural redefinition" is needed to support - through the renewed design of workplace conditions - changes in teachers' consciousness. In other words, workplace conditions should be modified in a way that makes clear that collaboration implies challenges for professional development without teachers having to abandon their autonomy. To realize this, teachers' voice should be heard, for not to end up in a situation where consensus is forced without taking notice of the wisdom teachers possess. Yet, it is equally important to link a vision to this voice. Indeed, "a world of voice without a vision is a world reduced to chaotic blabla where there are no means for arbitrating between voices, reconciling them, or drawing them together. Voices need to be not only heard, but also engaged, reconciled, and agreed with. It is important to attend not ontly to the aesthetics of articulating teacher voices, but also to the ethics of what these voices articulate." (Hargreaves, 1994b, p.62)

The essence of this vision is that each school should become a place where not only the pupils, but also the teachers can grow into the maximum of their possibilities (see also Vandenberghe, 1990). Attention for the development of professional relationships among team members based on personal feelings is needed. The study indeed demonstrates the importance teachers attach to warmth and mutual trust in their relationships with other team members. Yet, this medal has two sides. As Hargreaves (1994b) pointed out, this trust, the fact team members get along with one another on a personal basis, contributes to the development of loyalty, commitment and professionally challenging relationships, leaving scope for teachers' individuality. It can however also install (again) paternalism and dependence, and all the problems these imply. Fostering mutual trust thus is important, yet trust in people should be combined with trust in processes and expertise. We think a school should professionally try to become an organization characterized by collective expertise and striving to improve it's problem solving capacities. This consists of: aiming at a good communication, collective decision making, the creation of learning opportunities and learning space, the development of "networks" (also outside the school), commitment to reflect critically on the education offered etc. As Hargreaves (1994b) puts it: trust in people is important, but trust in processes and expertise goes beyond that. The latter has an open ending and is not free of risks, but it is essential for schools to improve and for teachers to develop professionally.

As such only schools where learning opportunities and learning space are created in a professional way and without denying teachers' individuality through the reconciliation of autonomy and collegiality in a circular tension, can guarantee teachers' much needed professional development to take place. Within such a context teachers can become professionals who not only are technically apt, but who are also conscious of the moral and political implications of the work they are committed to (with all the positive ad negative feelings this commitment evokes) (Hargreaves, 1994a).

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